

Contents

Marine Chemistry, Vol. 44 (1993)

Research Papers

Adsorption and desorption of aliphatic amines, amino acids and acetate by clay minerals and marine sediments Xu-Chen Wang, C. Lee.....	1
Nitrate reductor efficiency as an error source in seawater analysis C. Garside.....	25
Recovery of $^{15}\text{NH}_4^+$ in labelling experiments on coastal marine sediments M.C.J. Laima.....	31
Sediment trap fluxes of polycyclic aromatic hydrocarbons in the Mediterranean Sea E. Lipiatou, J.-C. Marty, A. Saliot	43
Size distribution of dimethylsulfoniopropionate (DMSP) in areas of the tropical northeastern Atlantic Ocean and the Mediterranean Sea S. Belviso, P. Buat-Ménard, J.-P. Putaud, Ba C. Nguyen, H. Claustre, J. Neveux.....	55
Sediment accumulation rates, historical input, postdepositional mobility and retention of major elements and trace metals in salt marsh sediments of the Scheldt estuary, SW Netherlands J.J.G. Zwolsman, G.W. Berger, G.T.M. Van Eck	73
Historical input and behaviour of hexachlorobenzene, polychlorinated biphenyls and polycyclic aromatic hydrocarbons in two dated sediment cores from the Scheldt estuary, SW Netherlands R. Van Zoest, G.T.M. Van Eck.....	95

Special Issue: Marine Physical Chemistry – In Memory of the Contributions Made to the Field by Dr. Ricardo Pytkowicz (edited by F.J. Millero)

Preface	iii
Photochemical redox cycling of iron in NaCl solutions D. Whitney King, R.A. Aldrich, S.E. Charnecki	105
Comparative yttrium and rare earth element chemistries in seawater R.H. Byrne, J.H. Lee	121
The measurement of sea water pH A.G. Dickson	131
The use of buffers to measure the pH of seawater F.J. Millero, J.-Z. Zhang, S. Fiol, S. Sotolongo, R.N. Roy, K. Lee, S. Mane	143
Titration alkalinity of seawater F.J. Millero, J.-Z. Zhang, K. Lee, D.M. Campbell.....	153
Coulometric total carbon dioxide analysis for marine studies: maximizing the performance of an automated gas extraction system and coulometric detector K.M. Johnson, K.D. Wills, D.B. Butler, W.K. Johnson, C.S. Wong	167
Measurement of fugacity of CO_2 in surface water using continuous and discrete sampling methods R. Wanninkhof, K. Thoning	189
Temperature dependence of CO_2 fugacity in seawater C. Goyet, F.J. Millero, A. Poisson, D.K. Shafer	205
The standard potential for the hydrogen–silver, silver chloride electrode in synthetic seawater D.M. Campbell, F.J. Millero, R. Roy, L. Roy, M. Lawson, K.M. Vogel, C. Porter-Moore	221
High-accuracy measurements of total dissolved inorganic carbon in the ocean: comparison of alternate detection methods C. Goyet, A.K. Snover	235
Thermodynamics of the dissociation of boric acid in seawater at $S = 35$ from 0 to 55°C R.N. Roy, L.N. Roy, M. Lawson, K.M. Vogel, C.P. Moore, W. Davis, F.J. Millero	243

The dissociation constants of carbonic acid in seawater in salinities 5 to 45 and temperatures 0 to 45°C
R.N. Roy, L.N. Roy, K.M. Vogel, C. Porter-Moore, T. Pearson, C.E. Good, F.J. Millero, D.M. Campbell . . . 249

The internal consistency of CO₂ measurements in the equatorial Pacific
F.J. Millero, R.H. Byrne, R. Wanninkhof, R. Feely, T. Clayton, P. Murphy, M.F. Lamb 269